

Date: Wed, 5 Oct 94 20:51:37 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: List  
Subject: Info-Hams Digest V94 #1097  
To: Info-Hams

Info-Hams Digest                      Wed, 5 Oct 94                      Volume 94 : Issue 1097

Today's Topics:

"How far" does 1 milliwatt (and 1 watt) go? (2 msgs)  
    CABLE TV LEAKAGE  
    Ford Ranger Experiences  
    FT-530 power plug update!@#  
Interference with a garage door (4 msgs)  
    internet gateway to DXCluster?  
    No code Techs and CW...  
    noise bridge kits?  
Radio Shack Violation (2 msgs)  
    Reflector group  
Request Info on Chico, CA Ham Club?  
    USA-EUROPE (???watts)  
    Voltage in France

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 4 Oct 1994 13:59:29 GMT  
From: mikeb@tdc.dircon.co.uk (Michael Barney)  
Subject: "How far" does 1 milliwatt (and 1 watt) go?

Could anyone enlighten me on "low power contest" for distance  
transmissions.

I seem to recall some "Hamfest" communications going 100's or thousands  
of miles on less than 1 watt transmit power (and not at microwave  
frequencies w/ large Parabolics either).

I'm specifically looking for "how far" on "how little power" under  
\*relatively ideal conditions\* for 1 milliwatt and 1 watt.

Thanks in advance,  
Direct reply or post appreciated,

Michael Barney  
mikeb@tdc.dircon.co.uk

-----  
Date: Wed, 5 Oct 1994 12:59:25 GMT  
From: phb@syseng1.melpar.esys.com (Paul H. Bock)  
Subject: "How far" does 1 milliwatt (and 1 watt) go?

rkm@vectorbd.com writes:

>Michael Barney (mikeb@tdc.dircon.co.uk) wrote:

>: I seem to recall some "Hamfest" communications going 100's or thousands  
>: of miles on less than 1 watt transmit power (and not at microwave  
>: frequencies w/ large Parabolics either).  
>: I'm specifically looking for "how far" on "how little power" under  
>: \*relatively ideal conditions\* for 1 milliwatt and 1 watt.

> I've never run more than 4 watts in the 1.5 years that I've had  
>my licence, and usually stay down at about 1 watt unless conditions  
>are \*REALLY\* bad. :-) My contacts average out to about 400+ miles  
>on the 40M band, although my longest-range contact was approximately  
>2800 miles with 2 watts. It's not unusual for dedicated QRP  
>enthusiasts to get several thousand miles per watt.

> So, in short, you can work around the world if you have patience,  
>a good antenna, and someone who is willing to dig your peanut-whistle  
>signal out of the noise.

From "200 Meters and Down" by Clinton B. DeSoto, published in 1936,  
page 112:

"But this paled before the performance of Loren G. Windom, 8GZ-8ZG,  
of Columbus, Ohio, who on December 30th (1925) communicated with (Henry A.)  
Kauper, a5BG (of Dulwich, Adelaide, South Australia) using an input of only  
0.567 watts to a UV-199 receiving tube! With the distance given as 10,100  
miles, this figured out to be 17,820 miles per watt. On January 3, 1926,  
contact was established with Major J. G. Swart, oA6N, in Capetown, South  
Africa, using 0.54 watts input. On February 28th, 8GZ worked George H.  
Shrimpton, z2XA, in Wellington, New Zealand, a distance of 8500 miles,  
with 0.493 watts input, giving 17,250 miles per watt. A filament poten-

tial of 4 volts was applied to the UV-199 tube during these tests, and a plate voltage from 70 to 75. So far as is known, these completely incredible records - in which much less power was used than is consumed in the ordinary flashlight bulb - still stand unbroken."

Two comments: First, I didn't check the \*frequency\* used for these tests, but it was most likely 20 meters (possibly 40 at night). Of course, there was no QRM in those days and very little electrical interference, so receiving conditions must have been stupendous compared with today. Second, recall that \*wire\* antennas were the norm in those days - no big yagis on towers with rotators!

BTW, does the name "Windom" ring a bell? Was 8GZ "the" Windom, or is that just a coincidence?

(|\_|) Paul H. Bock, Jr. K4MSG      Internet: pbock@melpar.esys.com  
| |) Principal Systems Engineer   Telephone: (703) 560-5000 x2062

"You can have my bug when you can pry my cold, dead fingers from around it....." - anonymous radiotelegraph operator

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Date: Tue, 4 Oct 1994 14:31:26 GMT  
From: hamed@netcom.com (Hammett and Edison Inc)  
Subject: CABLE TV LEAKAGE

Frank Garofalo (frankg@panix.com) wrote:  
: Does anyone know what the maximum allowable leakage is on UHF from cable  
: TV companies. I remembered it expressed in microvolts at some fixed  
: distance from the cable.

: Thanks

: --  
: Frank  
: frankg@panix.com  
: [ your ad here ]  
: --

-----  
Hammett & Edison Inc  
San Francisco

engr@h-e.com  
707/996-5200

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Date: 5 Oct 1994 08:23:43 -0500  
From: jpillera@umi.com (Joe Pillera)

Has anyone installed a VHF/UHF amateur transceiver in a Ranger pickup? I am considering purchasing a new vehicle soon, and need to know what problems and issues (if any) are involved with this truck model.

Please respond to my email address (jpillera@umi.com), as I don't have a newsreader at work.

-----  
Joe Pillera, N8QY0                               Voice: (313) 761-4700 x3214  
Software Engineering, Box 23                     Fax: (313) 677-8912  
University Microfilms International, Inc.      Email: jpillera@umi.com  
300 North Zeeb Road  
Ann Arbor, MI 48106-1346

10/04/94  
1pm Pacific

Otherwise Enjoy...Paul J. KC6JQT

Date: 4 Oct 1994 09:44:01 -0500  
From: horak@convex.com (David Horak)  
Subject: Interference with a garage door

In <dclydesdale.1.2E915BF7@bfsec.bt.co.uk> dclydesdale@bfsec.bt.co.uk (Derek Clydesdale) writes:

>Any advice would be most welcome,

You've probably already thought of this but I would have the opener plugged into a switchable outlet and turn it off when you are home using the ham gear. Unless that's typically when your SO is driving home :-)

David

-----  
Date: Tue, 4 Oct 1994 13:43:19 GMT  
From: dclydesdale@bfsec.bt.co.uk (Derek Clydesdale)  
Subject: Interference with a garage door

Hi,

Just wondering if any one else is having problems with valematic automatic remote control garage doors? I seem to have real probs on 80m especially on cw. The garage door actually starts to go up and down!

20m is also a problem but to a much lesser extent - the courtesy light just flashes on and off as I go key down.

I run about 100w on cw on all hf (EX warc) bands from an old FT101e into a g5rv/2 on 20 m and a 60ft length on wire on 80m.

Any advice would be most welcome,

Keith.

gi0ssa@gb7hmi.#63.gbr.eu

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Date: 4 Oct 94 15:27:45 GMT  
From: hawley@aries.scs.uiuc.edu (Chuck Hawley)  
Subject: Interference with a garage door

dclydesdale@bfsec.bt.co.uk (Derek Clydesdale) writes:

>Hi,

>Just wondering if any one else is having problems with valematic automatic  
>remote control garage doors? I seem to have real probs on 80m especially on  
>cw. The garage door actually starts to go up and down!

>20m is also a problem but to a much lesser extent - the courtesy light just  
>flashes on and off as I go key down.

>I run about 100w on cw on all hf (EX warc) bands from an old FT101e into a  
>g5rv/2 on 20 m and a 60ft length on wire on 80m.

>Any advice would be most welcome,

>Keith.

Put a .01uF ceramic (100v or more) across the terminals that go to the wires  
that go to the manual push-button by the kitchen door.

Chuck Hawley, KE9UW in Urbana, Illinois  
hawley@aries.scs.uiuc.edu  
School of Chemical Sciences, Electronic Services  
University of Illinois, Urbana-Champaign

-----  
Date: 4 Oct 94 09:42:14 -0800  
From: harrisok@vax.sonoma.edu  
Subject: Interference with a garage door

In article <dclydesdale.1.2E915BF7@bfsec.bt.co.uk>, dclydesdale@bfsec.bt.co.uk  
(Derek Clydesdale) writes:

> Just wondering if any one else is having problems with valematic automatic  
> remote control garage doors? I seem to have real probs on 80m especially on  
> cw. The garage door actually starts to go up and down!

Just a couple of weeks ago while out on a walk at night with my 2 meter HT, a  
garage door started to go up and down while I was transmitting. It actually  
went about 1/2 way up then came back down. I could see there was no one in the  
garage (and no one came out, thank goodness!) so I'm sure it was my signal.  
Ha! Don't know what brand opener they had, though... ;-)

Ken

--

Ken Harrison	Moosehead: Great beer!
N6MHG	
harrisok@sonoma.edu	...and a new experience for the moose!

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Date: Wed, 5 Oct 1994 11:08:40 GMT  
From: adenaf@utica.ge.com (Nicholas A Ferro)  
Subject: internet gateway to DXCluster?

Looking for a way to get DX spots via the internet, hopefully a connection to the central NY area.

-----  
Date: 4 Oct 1994 18:46:41 GMT  
From: ryanm@u.washington.edu (Ryan Mcneilly)  
Subject: No code Techs and CW...

Being a no code TECH I have a few comments on some of the commentary going around. If it weren't for the no code TECH I would not be a ham since I didn't have the patience or desire to learn it in the beginning. The NCT (No-Code-Tech) gave me an easy avenue into ham radio. However, now I desire to get onto HF. My solution is not to petition the FCC to grant NCT access to HF but to learn code. I think it is necessary to have hurdles at each increase in privlages to make people move forward, and to learn more than they previously did. I plan on following the rules rather than changing them. I don't see myself using CW very much when I first get on HF, but QRP holds my facination. Since QRP is best in CW I will probably be using it in the future.

Slaming the NCT as lazey is a dumb approach. All I needed was a regional emergency to spark the desire to get the code out of the way and get my general. The Central Washington fires this year provided an opportunity to see what HF could do for us in ARES. We also found that there weren't enough generals or above to allow us to keep a 24hour HF station online at one of the firebases. This is another reason for my desire to get my general. By all means shame the ones that don't want any distinctions between licenses since this is the Communist form of Hamming :)

I would suggest showing new NCT hams what HF offers in CW, voice, data, and video rather than shame them. Shaming me has the opposite effect on me then what was desired, I get in your face and slam back. I won't go away. I became hooked on hamming when I saw what could be done with voice on FM repeaters on 2m.

I may not get it till Jan or Feb but I am working on it! --Ryan

\* \* \* \* \*  
Ryan McNeilly Internet: ryanm@u.washington.edu  
KC7BYE - KCARES  
\* \* \* \* \*

"You can't deal from a position of weakness" --Alfred Thayer Mahan

Moral: Protect the 2nd Amendment!

My comments and opinions are my own and nobody else's!!!!

-----  
Date: Tue, 04 Oct 1994 17:24:04 -0800  
From: philkeys@olympus.net (Phil Keys)  
Subject: noise bridge kits?

Try Ten Tec kits (615) 453-7172. They have a noise bridge board kit for about \$13.

--  
philkeys@pt.olympus.net (Phil Keys) KB7WXQ  
Software Consultant - specializing in software safety & quality  
Port Hadlock, WA 98339 (206) 379-8650  
West of Puget Sound..South of British Columbia... 122 44.0W 48 02.0N  
-----  
-----

Date: 4 Oct 1994 17:10:49 GMT  
From: jcarter@orl.mmc.com (James Carter)  
Subject: Radio Shack Violation

In article i03@apakabar.cc.columbia.edu, jbaltz@merhaba.cc.columbia.edu (Jerry B Altzman) writes:

/In article <36l0sj\$fmo@jupiter.planet.net>,  
/Bill Sohl Budd Lake <billsohl@earth.planet.net> wrote:  
/>Yes, when you key the HT (as a non-licensed individual) you violate  
/>FCC rules...you actually transmit and that transmission extends  
/>to wherever propagation may permit at the time.  
/

/What if you key up inside of a shielded room?  
/

/>Bill Sohl K2UNK (billsohl@planet.net)  
/

///jbaltz

/jerry b. altzman Entropy just isn't what it used to be +1 212 650 5617  
/jbaltz@columbia.edu jbaltz@sci.ccny.cuny.edu KE3ML (HEPNET) NEVIS::jbaltz

I have been in a Radio Shack before and seen a "hamless" salesman doing a demo on a 2 meter HT!!!

Jim



o	o	ooo	o	o	ooo	oo	o	o		James A. Carter		Jcarter@orl.mmc.com		
o	o	o	o	o	o	o	o	o	oo	o		MARTIN MARIETTIA		FCC Lic. KD4PON
o	o	o	o	o	o	o	o	o	o	o		Electronics &		These views are my own and
o	o	o	o	oooo	ooo	o	o	o	oo		Missiles Division		not that of my employer.	
o	o	o	o	o	o	o	o	o	oo		Orlando, Florida			
o	o	ooo	o	o	oo	o	o				32855		Thanks Jim	

-----

Date: 4 Oct 1994 19:35:51 GMT  
 From: gxd@po.CWRU.Edu (Guy Deroose)  
 Subject: Radio Shack Violation

I a previous post,  
 Is it any more of a 'violation' for someone to pick up an ht on the rs  
 counter and 'kerchunk' a repeater as it is for someone who does NOT have  
 a driver's license to start the engine of a car in a showroom?

If a tree falls in the forest...:-)

--

I say Yes! One does not need to have a \_DRIVER's\_ license to simply  
 start a car, yet keying the transmitter is what the license in this case  
 is for, not simply turning power on to the tranceiver. Let's make sure  
 we are making sensible comparisons here.  
 73,  
 --

Guy A. DeRose  
 Physicist, PP-ASEL, KE6JTN, Homebrewer

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Date: Tue, 4 Oct 1994 17:39:55 GMT  
 From: jeg@aurora.jhuapl.edu (John Grimes)  
 Subject: Reflector group

Greetings

I am making this request on the behalf of someone else.  
 Does anyone know of any contest or dx "reflector groups"?  
 Where arte they, how to subscribe things like that.

Thanks  
73 de John kd3wy  
jeg@aardvark.jhuapl.edu

#include<Standard.Disclaimers>

-----  
Date: 5 Oct 1994 01:31:58 GMT  
From: dsimcox@oavax.csuchico.edu (Dr. David E. Simcox)  
Subject: Request Info on Chico, CA Ham Club?

Please let me know the person to contact regarding meeting times for the Chico area Ham club. Thank you. (916) 342-8034

-----  
Date: 4 Oct 1994 18:40:52 GMT  
From: andrewb@europe.EBay.Sun.COM (Andrew Bulucea)  
Subject: USA-EUROPE (???watts)

Hello,

What would be the minimum required power to establish communication in between USA (california) and France (Europe) on short-wave ?. I don't have a licence, just wondering if it is possible to communicate under 20Watts output power... Or 20Watts is simply an utopia ?.

Just curious and considering on getting a licence,  
Andrei

-----  
Date: 4 Oct 1994 17:22:56 GMT  
From: moritz@ipers1.e-technik.uni-stuttgart.de ()  
Subject: Voltage in France

In article <2E911803@smtp>, VEKINIS Peter <pve@dg13.cec.BE> wrote:  
>

>The voltage in continental Europe is 220V, spread over the two wires. That  
>is, it is 110V per phase with respect to ground. You cant really use 110V

WOW!

Where did you get this information from?

According to information available to me, the voltage in Europe is not yet fully standardized. The standard gradually adopted is \*230V\* with one live and one neutral phase. In fact the safety ground and the neutral phase are connected in house wiring. Putting 110 V on both phases will certainly produce some peculiar effects.

73, Moritz DL5UH

-----  
Date: 4 Oct 1994 15:09:15 GMT  
From: jbaltz@merhaba.cc.columbia.edu (Jerry B Altzman)

References<1994Sep30.172734.23514@news.csuohio.edu>  
<lestrade.780958492@Ra.MsState.Edu>, <36l0sj\$fmo@jupiter.planet.net>  
Subject: Re: Radio Shack Violation

In article <36l0sj\$fmo@jupiter.planet.net>,  
Bill Sohl Budd Lake <billsohl@earth.planet.net> wrote:  
>Yes, when you key the HT (as a non-licensed individual) you violate  
>FCC rules...you actually transmit and that transmission extends  
>to wherever propagation may permit at the time.

What if you key up inside of a shielded room?

>Bill Sohl K2UNK (billsohl@planet.net)

//jbaltz  
jerry b. altzman Entropy just isn't what it used to be +1 212 650 5617  
jbaltz@columbia.edu jbaltz@sci.ccny.cuny.edu KE3ML (HEPNET) NEVIS::jbaltz

-----  
Date: Tue, 4 Oct 1994 16:16:25 GMT  
From: jerrys@canada.sbi.com (Jerry Simonowits)

References<1994Sep30.172734.23514@news.csuohio.edu>  
<lestrade.780958492@Ra.MsState.Edu>, <Cx3HH4.7Co@pica.army.mil>  
Subject: Re: Radio Shack Violation

In article <Cx3HH4.7Co@pica.army.mil>, mellis@ramcad.pica.army.mil (Mark Ellis) writes:

|>  
|> In article <lestrade.780958492@Ra.MsState.Edu>, lestrade@Ra.MsState.Edu  
|> (John Patrick Lestrade) writes:  
|>  
|> >Is it any more of a 'violation' for someone to pick up an ht on the rs  
|> >counter and 'kerchunk' a repeater as it is for someone who does NOT have

```

|> >a driver's license to start the engine of a car in a showroom?
|> -----
|> Start the car? No. Drive the car? Yes.
|>
|> If you transmit on the thing (the radio, not the car, smarty) without
|> a license, you are in violation. If you kerchunk a repeater, without
|> identifying, license or not, you are also in violation. Although that
|> only applies to license holders, since if you didn't have a license, what's
|> to identify?
|>          .....Mark
|>
|> -----
|> Mark E. Ellis      N2WZB          Systems Administrator
|>                                PA&TD Software Quality Engineering Branch
|> <mellis@ramcad.pica.army.mil> AMSTA-ARA-QAT-A, Bldg 62N, Picatinny Arsenal, NJ
|> -----
|>          http://ramcad.pica.army.mil/people/mellis.html

```

Or, for a better analogy:

Starting the Car = Turning on the HT  
Driving the car on a public road = Transmitting on the HT

Jerry  
--  
Jerry Simonowits  
Salomon Inc.  
Network Engineering  
Systems Engineering  
Phone: 201-896-7330  
Email: jerry@canada.sbi.com  
(KB2GCG,AFA1CM)

-----  
Date: Tue, 4 Oct 1994 17:33:05 GMT  
From: dbushong@wang.com (Dave Bushong)

References<1994Sep30.172734.23514@news.csuohio.edu>  
<lestrade.780958492@Ra.MsState.Edu>, <linleyCwzAB1.HMp@netcom.com>  
Subject: Kerchunking: legal? (Was: Re: Radio Shack Violation)

linley@netcom.com (Bruce James Robert Linley) writes:

>In ye olden post lestrade@Ra.MsState.Edu (John Patrick Lestrade) spake...  
>>Is it any more of a 'violation' for someone to pick up an ht on the rs

>>counter and 'kerchunk' a repeater as it is for someone who does NOT have  
>>a driver's license to start the engine of a car in a showroom?

>It will be a violation if he drives it onto the road. However, if a  
>non-ham keys a radio into a dummy load, I do not believe that would  
>be a violation.

We know that you need to identify if you transmit, but check out this  
wording in Part 97:

\(sc 97.305 Authorized emission types.

(b) A station may transmit a test emission on any frequency  
authorized to the control operator for brief periods for  
experimental purposes, ...

This sounds a lot like kerchunking defined.

\(sc 97.119 Station identification.

(a) Each amateur station, except a space station or  
telecommand station, must transmit its assigned call sign on its  
transmitting channel at the end of each communication, and at  
least every 10 minutes during a communication, ...

When you kerchunk, it's not really a communication, since you  
are not communicating with anyone, so is an ID required?

Dave, KZ10

p.s. I don't kerchunk, because I know my radio is working already.

--

Dave Bushong

OPEN/image Recognition Products

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Date: 4 Oct 1994 10:25:39 -0400  
From: nick@cs.unc.edu (Nick England)

References<fred-mckenzie-2909941308380001@k4dii.ksc.nasa.gov>  
<jdow.781000539@BIX.com>, <36nhj1\$lq3@jupiter.planet.net>  
Subject: Re: 6 meter AM net, was Re: DOES ANYONE USE 2M AM?

The generally recognized AM calling frequency is 50.4 MHz. This has  
been the standard since at least the late 1950's.

I worked lots of folks with a Sixer and a wire dipole back in the "good  
old days". Six is a great band for antenna work, skip, etc.

Nick KD4CPL (WA4SXT on 50.4 MC in the early 60's)

-----  
Date: 5 Oct 1994 13:49:54 GMT

From: ham@wam.umd.edu (Scott Richard Rosenfeld)

References<36rn41\$1d7@newsgate.dircon.co.uk> <0>,  
<1994Oct5.114320.26507@brtph560.bnr.ca>

Subject: "How far" does 1 milliwatt (and 1 watt) go?

More correct is to wonder how far an E-M wave of a certain power  
can travel.

Say you're transmitting 1 watt to a real "isotropic" radiator.  
Your "power flux" is then  $1 \text{ watt} / (4 \cdot \pi \cdot r^2)$ , or the power radiated  
divided by the surface area of the sphere at some given distance.

By determining that some solid angle containing power will direct  
to your desired location, you can figure out just how much power is  
going into the ionosphere along your desired path. Chances are  
PRETTY GOOD that not all of that 1 watt is going along the desired  
path...

Now use a beam. Integrate over the beamwidth that's going in the  
direction of the skip, and you'll find that considerably more power  
than with the isotropic radiator is going in the desired direction.

So if you've got a 10 dbi antenna, you need 1/10 the power to  
achieve the same results if it's pointed in the right direction.

I've been heard in OK/OM on 3 watts to a dipole with a 6 element  
monobander on the other end...

And don't forget about "effective gain" of CW over phone, either.  
SSB carries more information, but must spread the power out over  
a wide spectrum in order to do so. CW has a very narrow BW...

--

73,

----- The  
 \ / Long Original

Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live \$5.00  
WAC-CW/SSB WAS DXCC - 130 QSLed on dipoles -----| Dipoles! Antenna!

-----

Date: Tue, 4 Oct 94 13:24:09 GMT

From: rdewan@uhura.cc.rochester.edu (Rajiv Dewan)

References<CwwGMG.4nI@nntpa.cb.att.com> <36h4nn\$le4@dartvax.dartmouth.edu>,  
<36la5b\$6ti@clarknet.clark.net>

Subject: Re: RadioMap service expands into OH, PA, MO (and IL, IN, MI,

In article <36la5b\$6ti@clarknet.clark.net> joseph1@clark.net (Joseph A. Liu)  
writes:

>Kenneth E. Harker (Kenneth.E.Harker@Dartmouth.Edu) wrote:

>: This is a blatant commercial advertisement

>

>IT S NOT YOU SHIT HEAD!

Thank you for your cogent, well-mannered and courteous post. The  
next time you post something equally brilliant, could you kindly  
make the distribution "universe" instead of just "world"? I am  
sure that other sentient beings would benefit from your postings.

Rajiv Dewan  
aa9ch/2

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End of Info-Hams Digest V94 #1097

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